II. LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of the claims in the application:

1. (Currently amended) ~~A~~ An isolated nucleic acid consisting of a nucleotide sequence selected from the group consisting of SEQ ID NO: 58, or a compliment thereof.

2. (Cancelled)

3. (Currently amended) ~~A~~ An isolated nucleic acid exhibiting a percentage identity of ~~between~~ about 90% to about 100% with at least a 10 nucleotide region of the sequence of a nucleic acid of claim ~~2~~ 1.

4. (Cancelled)

5. (Currently amended) The isolated nucleic acid of claim 3 wherein said nucleic acid is detectably labeled.

6. (Currently amended) The isolated nucleic acid of claim 5 wherein said sequence is a marker of osteoarthritis progression.

7. (Currently amended) The isolated nucleic acid of claim 5 wherein said label is selected from the group consisting of radioactive, fluorescent, chemi-luminescent, and chromogenic agents, and magnetic particles.

8-10 (Cancelled)

11. (Currently amended) A recombinant DNA comprising ~~a~~ an isolated nucleic acid according to one of claims ~~1-4~~ 1or 3, ~~or 8~~, wherein the recombinant nucleic acid further comprises a promoter or partial promoter region.

12-17 (Cancelled)

18. (Currently amended) A composition comprising ~~a~~ an isolated nucleic acid as claimed in one of claims ~~1-3~~ 1 or 3, or a complement thereof.

19-27 (Cancelled)

28. (canceled)

29. (Original, **renumbered claim 28**) A transformed cell having the antisense of a nucleic acid molecule of claim 1.

30. (Previously presented, **renumbered claim 29**) A process for diagnosis or prognosis of osteoarthritis a mammal from the expression of mRNA or cDNA that is identical to at least 20 nucleotides of a nucleotide sequence selected from the group consisting of SEQ NO: 1 through SEQ NO: 82, or complements thereof.

31. (Cancelled, **renumbered claim 30**)

32. (New) A method of identifying osteoarthritis modulators comprising the steps of:

(a) contacting a cell having a receptor for a nucleic acid sequence of SEQ ID NO: 58, or a compliment thereof, with a test compound; and

(b) detecting the affinity of the test compound to the receptor.

33. (New) The method of Claim 32 further comprising the step of labeling the test compound.

34. (New) The method of Claim 33 wherein said step of labeling a test compound comprises coupling the test compound with a radioisotope.

35. (New) The method of Claim 34 wherein said radioisotope comprises ^{125}I, ^{35}S, ^{14}C, or ^{3}H.

36. (New) The method of Claim 32 wherein said step of detecting the affinity of the test compound to the receptor comprises direct counting of radioemmission or scintillation counting.

37. (New) The method of Claim 32 wherein said step of detecting the affinity of the test compound to the receptor comprises measuring the rate at which a cell acidifies its environment.

38. (New) The method of Claim 37 wherein the step of measuring the rate at which a cell acidifies its environment is performed by a light-addressable potentiometric sensor.

39. (New) The method of Claim 32 wherein said step of labeling a test compound comprises coupling the test compound with an enzymatic label.

40. (New) The method of Claim 39 wherein said enzymatic label comprises horseradish peroxidase, alkaline phosphatase, or luciferase.

41. (New) The method of Claim 32 wherein said cell is of mammalian origin.

42. (New) A method of identifying osteoarthritis modulators comprising the steps of:

(a) contacting a cell having a receptor for a nucleic acid sequence of SEQ ID NO: 58, or a compliment thereof, with a receptor ligand or biologically-active portion thereof to form an assay mixture,

(b) contacting said assay mixture with a test compound, and

(c) determining the ability of the test compound to interact with the receptor, wherein determining the ability of the test compound to interact with the receptor comprises determining the ability of the test compound to preferentially bind to the receptor as compared to the ability of the ligand, or the biologically active portion thereof, to bind to the receptor.

43. (New) The method of Claim 42 wherein said step of determining the ability of the test compound to interact with the receptor comprises measuring direct binding with an Enzyme-Linked Immunoassay.

44. (New) The method of Claim 42 wherein said step of determining the ability of the test compound to interact with the receptor comprises the step of detecting a cellular response.

45. (New) The method of Claim 44 wherein said step of detecting a cellular response comprises measuring intracellular Ca^{2+} levels.

46. (New) The method of Claim 44 wherein said step of detecting a cellular response comprises measuring intracellular diacylglycerol levels.

47. (New) The method of Claim 44 wherein said step of detecting a cellular response comprises measuring intracellular IP^3 levels.

48. (New) The method of Claim 44 wherein said step of detecting a cellular response comprises measuring development, differentiation or proliferation of said cell.